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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,260	09/22/2003	Kiichiro Ito	P21-155424M/YS	7125

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VIENNA, VA 22182-3817

EXAMINER
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RODRIGUEZ, RUTH C

ART UNIT	PAPER NUMBER
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3677

MAIL DATE	DELIVERY MODE
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07/24/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/665,260	ITO, KIICHIRO	
	<b>Examiner</b>	<b>Art Unit</b>	
	Ruth C. Rodriguez	3677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 26 April 2007.
- 2a) This action is **FINAL**.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 2,3,5,6,12-16 and 22-25 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 2,5,6,12,13 and 16 is/are allowed.
- 6) Claim(s) 3,14,15,22 and 23 is/are rejected.
- 7) Claim(s) 24 and 25 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 04 November 2003 is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    - a) All    b) Some \* c) None of:
      1. Certified copies of the priority documents have been received.
      2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
      3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 12/06/06.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statement (IDS) submitted on 06 December 2006 has been considered by the examiner.

### ***Claim Objections***

2. Claim 25 is objected to because of the following informalities: Claim 25 recites the limitation "the non-removable closed end" in the second line. There is insufficient antecedent basis for this limitation in the claim. Claim 25 should depend from claim 24 instead of claim 3. Correction is required.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 3677

4. Claims 3, 14, 15, 22 and 23 rejected under 35 U.S.C. 103(a) as being unpatentable over Bivens et al. (US 6,189,662 B1) in view of Oshida (US 4,856,625) and Seiichi (US 5,333,843).

Bivens discloses a string type air damper (10) comprising a cylinder (20,46), a monolithic piston (12,13,14,15,24,30) having a string member portion (24,30) and a helical spring (44). The cylinder is formed in a tubular shape that defines a guide hole at one end portion thereof (Figs. 5 and 6). The monolithic piston moves in the cylinder (Figs. 5 and 6). The helical spring biases the piston toward the other end portion of the cylinder (Fig. 6). The string member portion is guided from inside of the cylinder to outside thereof through the guide hole (Figs. 5 and 6). The string member portion having a belt shape is capable of being bent (since it is very thin and is made of plastic). Bivens fails to disclose that the string member has a flat belt shape and the that the guide hole has a flat opening and a smooth arcuate face. However, Oshida teaches a string type air damper comprising a cylinder (16,17) and a piston (5) having a string member portion (6). The cylinder is formed in a tubular shape that defines a guide hole (12) at one end portion thereof. The piston moves in the cylinder (Fig. 2). The string member portion is guided from inside of the cylinder to outside thereof through the guide hole (Figs. 1-6). Oshida teaches that use of string member portions having a flat belt shape is known in the string type air damper as clearly illustrated in the drawings. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the flat belt shape taught by Oshida for the string member portion disclosed by Bivens since Oshida teaches that the use of string

member portions having a flat belt shape is well known in the string type air damper. Regarding to the guide hole having a flat opening and a smooth arcuate face, Seiichi teaches a string type air damper comprising a cylinder (1), a piston (2) having a string member portion (S) and a helical spring (4). The cylinder is formed in a tubular shape that defines a guide hole at one end portion thereof (Figs. 1-12). The piston moves in the cylinder (Figs. 1-12). The helical spring biases the piston toward the other end portion of the cylinder (Figs. 1-12). The string member portion is guided from inside of the cylinder to outside thereof through the guide hole (Figs. 1-12). The guide hole of the cylinder has a smooth arcuate face continuing to a wide width edge of the opening so that the belt-shaped string member is bendable and guidable along the arcuate face (Figs. 1-3 and 9). The string member portion having the belt shape is bent and guided along the arcuate face of the guide hole (Figs. 1-3 and 9). The string can freely protrude from the cylinder in a desired direction by the arcuate face without requiring the use of guide means and the spring does not sustain a fracture because it only contact a smooth arcuate face (C. 3, L. 36-48). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the smooth arcuate face taught by Seiichi in the device disclosed by Bivens and modified by Oshida where the curved surface should has a flat opening that corresponds to the flat belt shape of the string member portion since a change in the shape of a prior art device is a design consideration within the skill of the art. In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966). The smooth arcuate face of Seiichi will allow the string member portion to freely protrude from the cylinder in a desired direction by the arcuate face without

requiring the use of guide means and the string member portion does not sustain a fracture because it only contact a smooth arcuate face.

The guide hole modified in accordance with the teachings of Seiichi comprises a shape that substantially corresponds to a cross-section of the string member portion (Figs. 1-12 of Seiichi).

The string type air damper disclosed by Bivens further comprises a mount integrally molded on the piston for receiving an end portion of the helical compression spring (Figs. 1-6).

Bivens also discloses that the monolithic piston includes a spring mount portion that protrudes from a surface of the monolithic piston towards the helical spring (Figs. 1-6).

Oshida teaches that the string member has a substantially rectangular cross-section (Figs. 1-6).

#### ***Allowable Subject Matter***

5. Claims 2, 5, 6, 12, 13 and 16 are allowed.
6. Claims 24 and 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

7. Applicant's arguments with respect to claims 3, 14, 15, 22 and 23 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth C Rodriguez whose telephone number is (571) 272-7070. The examiner can normally be reached on M-F 07:15 - 15:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on (571) 272-7075.

Submissions of your responses by facsimile transmission are encouraged. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase the patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as PTO's mailroom processing and delivery time. For a complete list of correspondence **not** permitted by facsimile transmission, see MPEP § 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee that the applicant is paying by check **should not** be submitted by facsimile transmission separately from the check.

Responses submitted by facsimile transmission should include a Certificate of Transmission (MPEP § 512). The following is an example of the format the certification might take:

I hereby certify that this correspondence is being facsimile transmitted to the Patent and Trademark Office (Fax No. (571) 273-8300) on (Date).  
(Typed or printed name of person signing this certificate)  
(Signature)

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MPEP § 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response has been transmitted by facsimile will cause further unnecessary delays in the processing of your application, duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-6640.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/RCR/  
Ruth C. Rodriguez  
Patent Examiner  
Art Unit 3677

/James R. Brittain/  
Primary Examiner  
Art Unit 3677

rcr  
July 20, 2007